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EXAMINER

CHANG, JUNGWON

ART UNIT PAPER NUMBER

2154

| SHORTENED STATUTORY PERIOD OF RESPONSE | MAIL DATE | DELIVERY MODE |
|--|------------|---------------|
| 3 MONTHS | 12/20/2006 | PAPER |

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

09/904,465

Applicant(s)

SWENSON ET AL.

Examiner

Jungwon Chang

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 October 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

FINAL ACTION

1. This Office Action is in response to amendment filed on 10/17/06. Claims 1-20 are presented for examination.
2. In the previous Office Action, the examiner requested to update co-pending application recited on page 6, lines 11-14 of the present application, however, the applicant updated the cross reference to related application recited on page 1 of the present application in the amendment filed on 10/17/06. Therefore, the co-pending application stated on page 6, lines 11-14 still has to be updated (i.e., Patent No. xx/yyy). Appropriate correction is required.

Claim Rejections - 35 USC § 101

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. Claims 9-10 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claim 9 is not limited to tangible embodiments. In view of applicants' disclosure, specification page 13, lines 8-31, the medium is not limited to tangible embodiments, instead being defined as including both tangible embodiments (e.g., machine-readable storage medium) and intangible embodiments (e.g., transmission medium). Claim 10 is intangible embodiments (i.e., modulated data signal carrying computer executable instruction). As such, the claim is

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not limited to statutory subject matter and is therefore non-statutory."

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-7, 9-17, 19 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over de Vries et al. (US 6,704,738), hereinafter de Vries, in view of Smith et al. (US 6,798,886), in view of Smith.

7. As to claim 1, de Vries discloses the invention substantially as claimed, including a method for automatically performing digital signal processing (DSP) processing on media entities (col. 1, lines 8-31) comprising the steps of:

identifying media entity data including identifying a plurality of raw media entities (12, fig. 1) in a database for DSP processing (figs. 8-10; col. 5, lines 8-24, "creating of an object in the meta database 26 corresponding to the raw audio/video data 12 and assign object an object identification number");

processing said identified media entity data in a computing environment having at least one computer server (server, fig. 1) to create DSP processed media entity data (col. 5, lines 25-64); and

aggregating said DSP processed data for storage in a persistent data store (col.

1, lines 33-43; col. 2, lines 23-43).

8. de Vries discloses the processing comprising determining activity and classifying said DSP processed data. However, de Vries does not specifically disclose that classifying said DSP processed data based, at least in part, on the activity is within the frequency range. Smith discloses classifying said DSP processed data based, at least in part, on the activity is within the frequency range (figs. 1, 4, 8; fig. 9, "separating harmonics for effects"; col. 1, line 17 – col. 2, line 40, "signal consists of a fundamental frequency, first harmonic f_1 , which is typically the lowest frequency...each harmonic has an amplitude and phase relationship to the fundamental frequency that identifies and characterizes the perceived sound"; col. 5, line 63 – col. 6, line 9). It would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine the teachings of de Vries and Smith because Smith's classifying data within the frequency range would allow the system to identify and characterize the perceived sound (Smith, col. 2, lines 12-26).

9. As to claim 2, de Vries discloses an automated DSP processing process in accordance with the method of claim 1 wherein said identifying step comprises the steps of:

communicating with at least one data store having DSP unprocessed media entity data (col. 5, line 8 – col. 6, line 17);

generating data identifying information about said unprocessed media entity data (figs. 8-10; col. 5, lines 8-24, "creating of an object in the meta database 26

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corresponding to the raw audio/video data 12 and assign object an object identification number"); and

communicating said generated data identifying information for use in DSP processing (col. 5, lines 8-64, "generating a digital representation").

10. As to claim 3, de Vries discloses receiving DSP unprocessed media entity data (figs. 2-3); segmenting said DSP unprocessed media entity data for processing (col. 10, lines 32-38; col. 11, lines 57-61); and spawning at least one DSP process performing DSP functions and operations on said DSP unprocessed media entity data to produce DSP processed data (col. 9, lines 20-67).

11. As to claim 4, de Vries discloses copying data from a media entity data store having DSP unprocessed media entity to at least one portion of a computing environment performing DSP processing (col. 5, lines 8-24; col. 6, lines 18-60).

12. As to claim 5, de Vries discloses converting said unprocessed media entity data into a format consistent with DSP processing (col. 5, lines 8-24; col. 6, lines 18-60).

13. As to claim 6, de Vries discloses deleting the originally copied data once said converting is completed (deleting data is inherent).

14. As to claim 7, de Vries discloses collecting said DSP processing data for storage

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in a persistent DSP processed media entity data store (col. 1, lines 33-43; col. 2, lines 23-43).

15. As to claims 9 and 10, they are rejected for the same reasons set forth in claim 1 above. In addition, de Vries discloses a computer readable medium bearing computer executable instructions (co. 26, "claim 25").

16. As to claim 11, it is rejected for the same reasons set forth in claim 1 above.

17. As to claim 12, it is rejected for the same reasons set forth in claim 1 above. In addition, de Vries discloses a media entity identification system that operates on at least one cooperating data store having DSP unprocessed media entities to identifying DSP unprocessed media entities (figs. 8-10; col. 5, lines 8-24, "creating of an object in the meta database 26 corresponding to the raw audio/video data 12 and assign object an object identification number"); a DSP processing system receiving said DSP unprocessed media entities (figs. 2-3) and performing DSP operations and/or function on said DSP unprocessed media entities to generated DSP processed media entities (col. 5, lines 25-64); and an aggregation system for aggregating DSP processed media entities into data sets representative of original DSP unprocessed media entity data sets for storage in a persistent data store having aggregating DSP processed media entities(col. 1, lines 33-43; col. 2, lines 23-43).

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18. As to claim 13, de Vries discloses a distributed computing environment having at least two computer servers capable of executing distributed automated DSP processing processes (fig. 1; col. 4, line 53 – col. 5, line 7).

19. As to claim 14, de Vries discloses identification system generates identification information about DSP unprocessed media entities for communication to said DSP processing system (figs. 8-10; col. 5, lines 8-24, “creating of an object in the meta database 26 corresponding to the raw audio/video data 12 and assign object an object identification number”).

20. As to claim 15, de Vries discloses employing said generated identification information to retrieve DSP unprocessed media entity data from said cooperating data store having said DSP unprocessed media entity data (figs. 8-10; col. 5, lines 8-24, “creating of an object in the meta database 26 corresponding to the raw audio/video data 12 and assign object an object identification number”).

21. As to claim 16, de Vries discloses said DSP processing system spawns at least one DSP process on one of said least two computer servers to process said DSP unprocessed media entity data (col. 9, lines 20-67), said DSP process converting said DSP unprocessed media entity data to a data format consistent with DSP processing (col. 5, lines 8-24; col. 6, lines 18-60).

22. As to claim 17, de Vries discloses a communication means for communicating

said DSP unprocessed media entity data from said DSP unprocessed media entity data store (figs. 1-2).

23. As to claim 19, it is rejected for the same reasons set forth in claims 1 and 12 above. In addition, de Vries discloses providing a computing environment capable of executing at least one DSP process, said DSP process identifying DSP unprocessed media entities and performing DSP functions and operations on said identified DSP unprocessed media entities to generate DSP processed media entities (figs. 8-10; col. 5, lines 8-24, "creating of an object in the meta database 26 corresponding to the raw audio/video data 12 and assign object an object identification number"), wherein said computing environment is a distributed computing environment capable of running at least two parallel DSP processes;

providing a data store having at least one unprocessed media entity (col. 5, lines 8-24; col. 6, lines 61-64); and

providing a persistent data store capable of storing DSP processed media entities (col. 1, lines 33-43; col. 2, lines 23-43).

24. As to claim 20, de Vries discloses providing at least one communications means to communicate DSP processed media entities to participating users (col. 4, lines 53-66, "searching, browsing and retrieving").

25. Claims 8 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over

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de Vries et al. (US 6,704,738), hereinafter de Vries, in view of Blum et al. (US 5,918,223), hereinafter Blum.

26. As to claims 8 and 18, de Vries discloses collecting data for all DSP processed media entities (col. 2, lines 23-67); sorting data (col. 21, line 11 – col. 22, line 8, “rank” “weight”); and storing said aggregated DSP processed entity data set in a persistent data store (col. 1, lines 33-43; col. 2, lines 23-43). However, de Vries does not specifically disclose sorting the collected data. Blum discloses sorting the collected data (col. 11, line 25 – col. 12, line 33; col. 17, lines 9-33). It would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine the teachings of de Vries and Blum because Blum’s sorting the collected data would allow a database to create an ordered list of the most similar media (Blum, col. 18, lines 1-4).

Conclusion

27. Applicant’s arguments with respect to claims 1-20 have been considered but are moot in view of the new ground(s) of rejection.

28. Applicant’s amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

29. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jungwon Chang whose telephone number is 571-272-3960. The examiner can normally be reached on 9:30-6:00 (Monday-Friday).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John A Follansbee can be reached on 571-272-3964. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic

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Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

December 12, 2006

A handwritten signature in black ink, appearing to read "Jungwon Chang".

JUNGWON CHANG
PRIMARY EXAMINER
TECHNOLOGY CENTER 2100